

FIG. 1

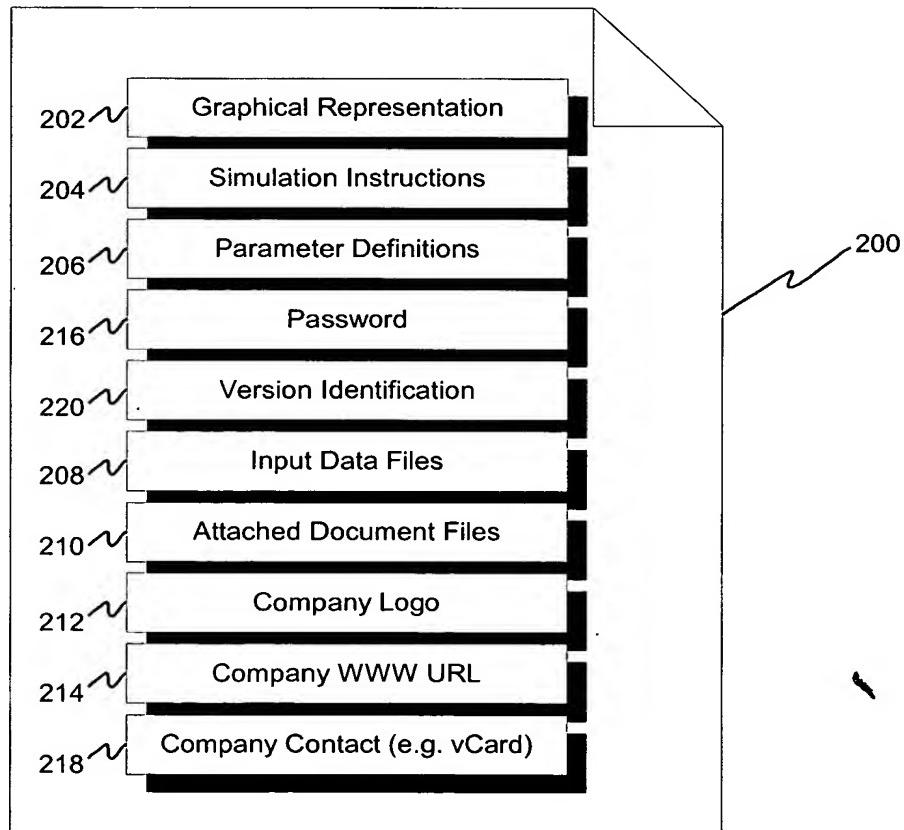


FIG. 2

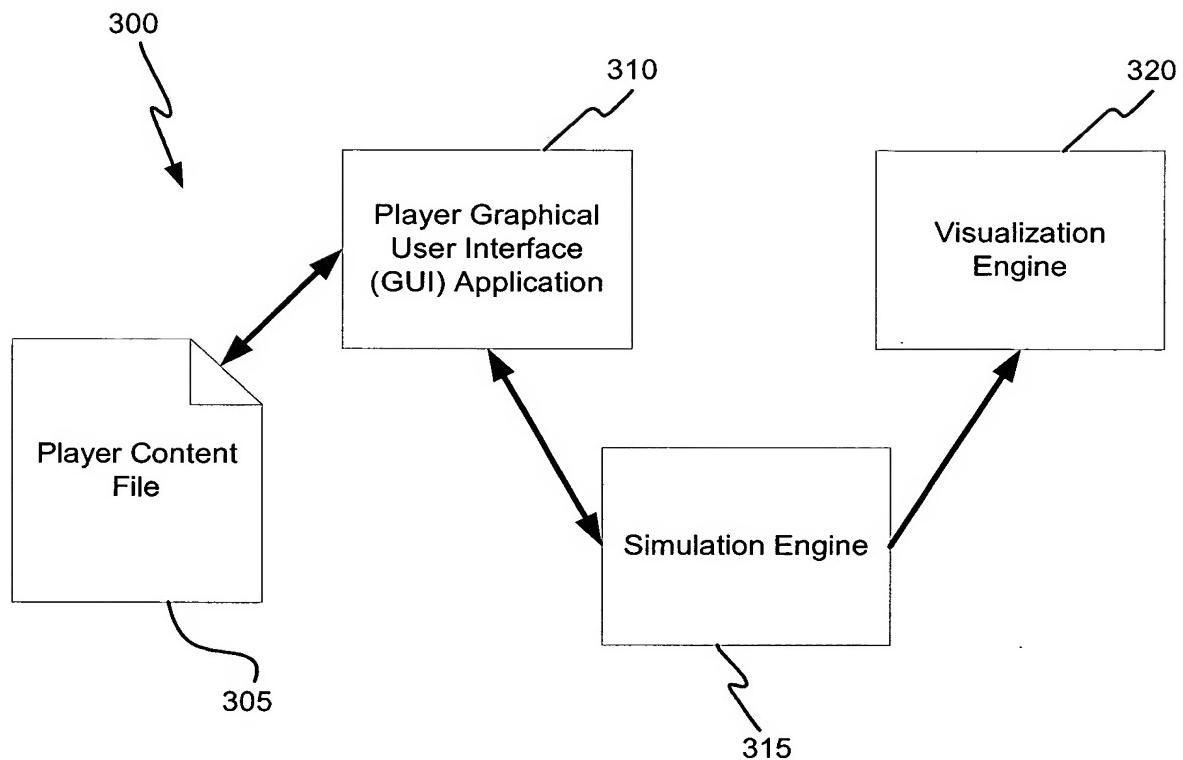


FIG. 3

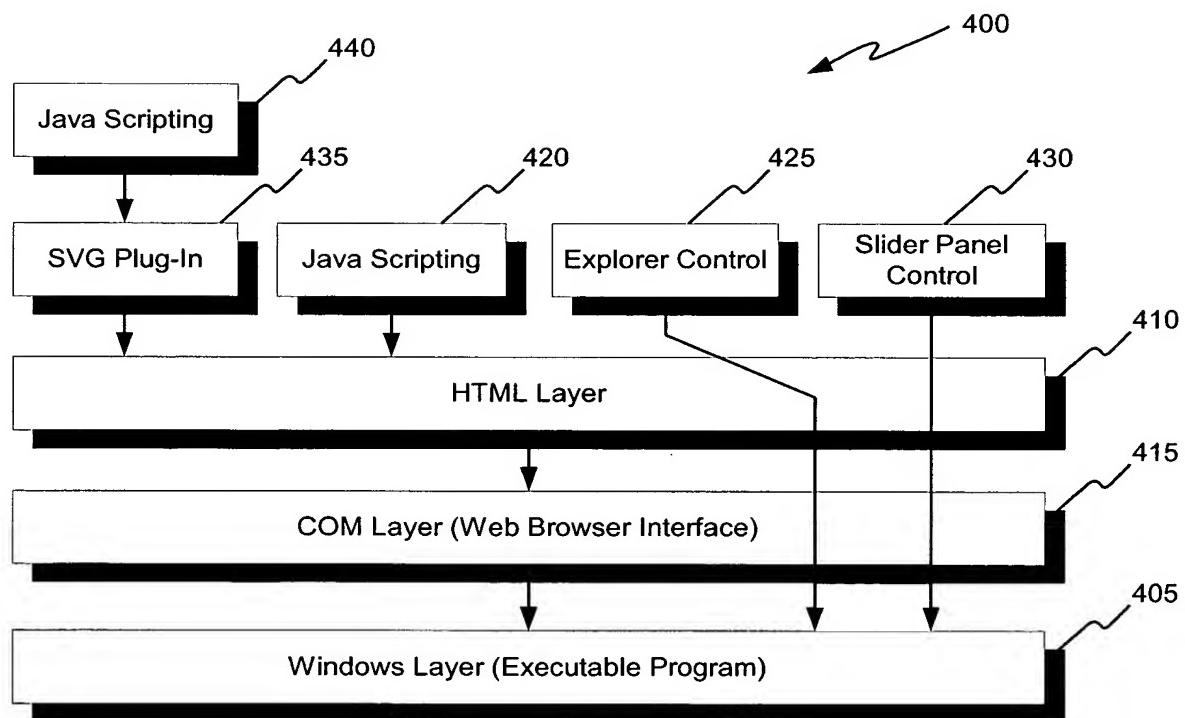


FIG. 4

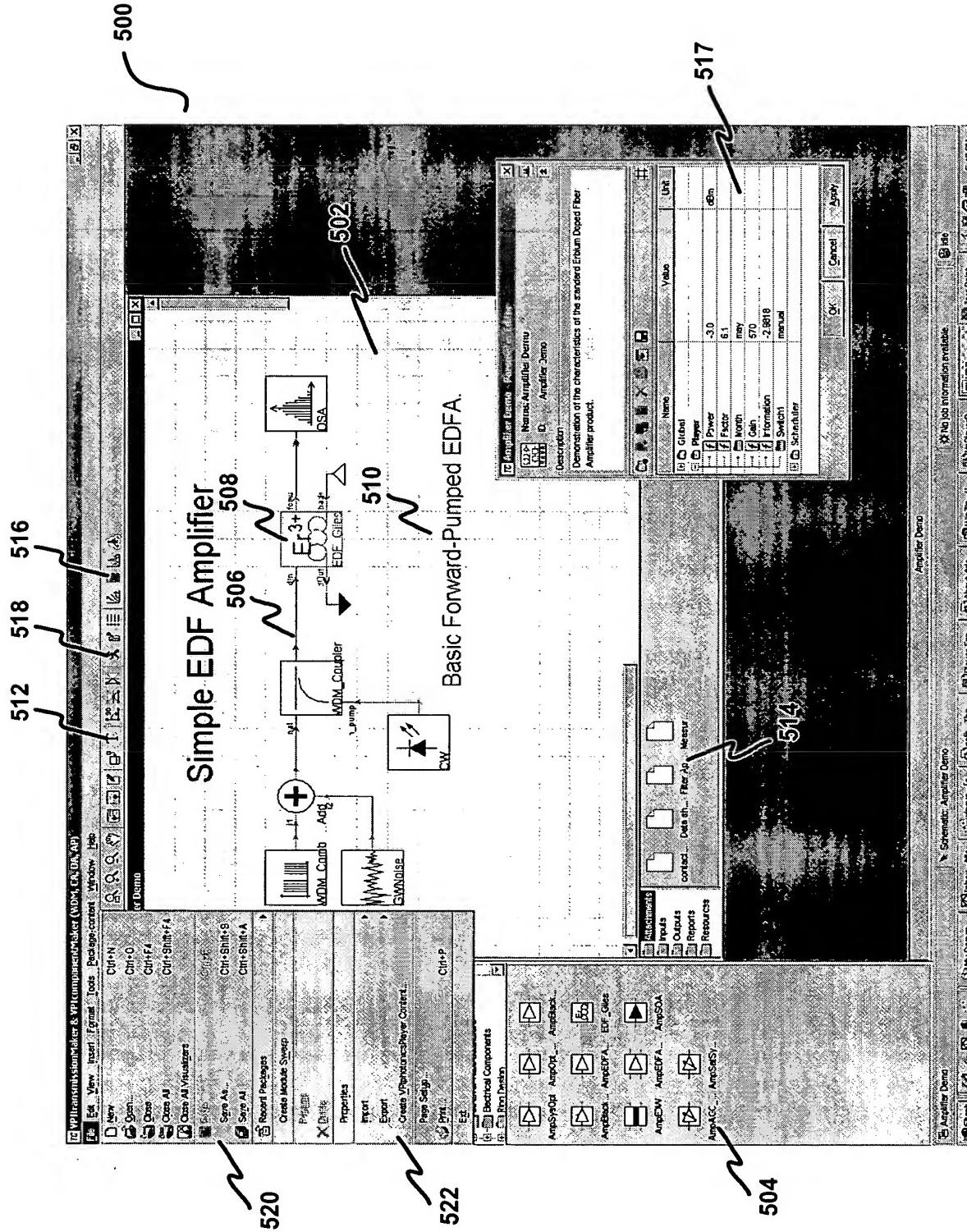


FIG. 5

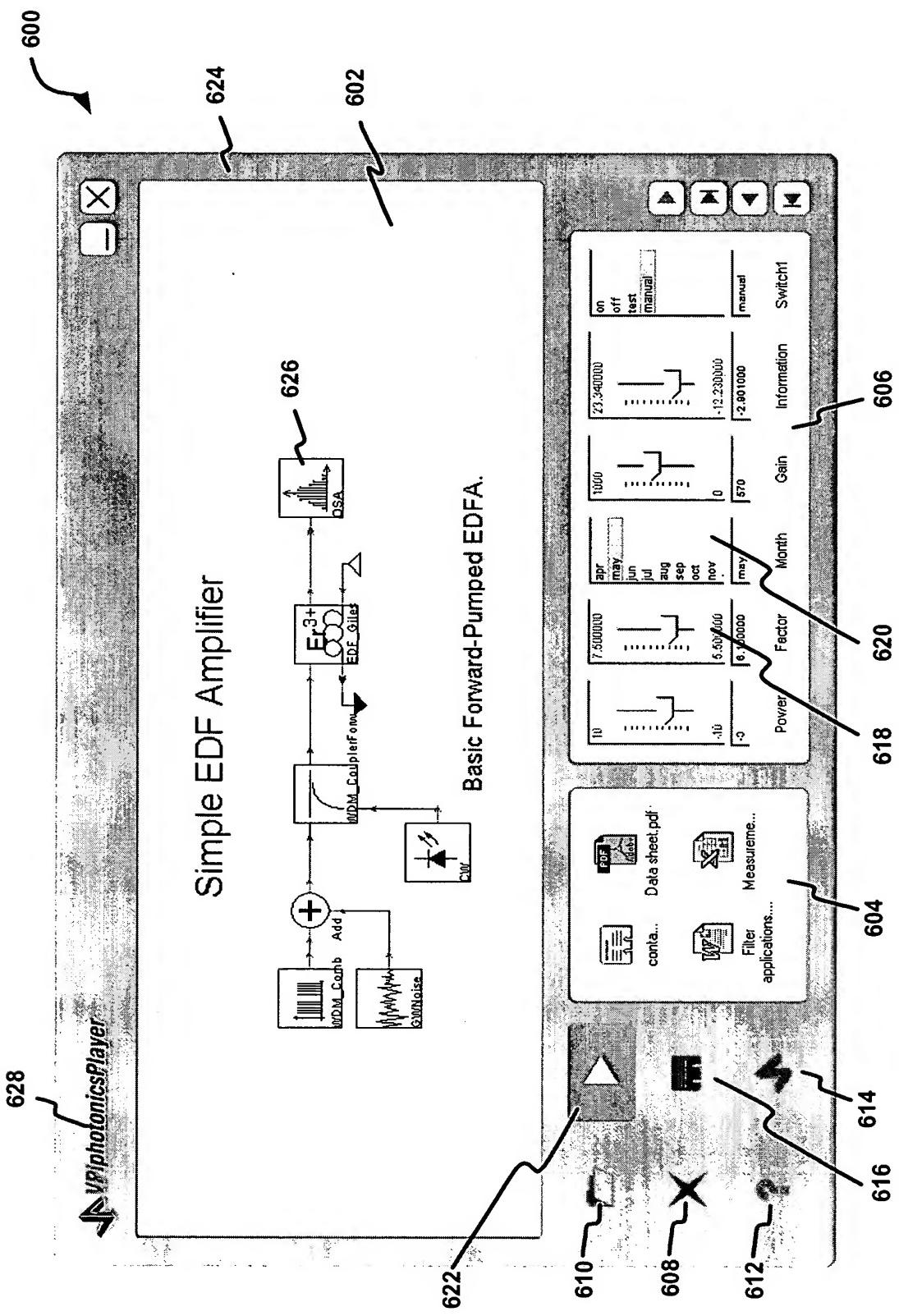


FIG. 6

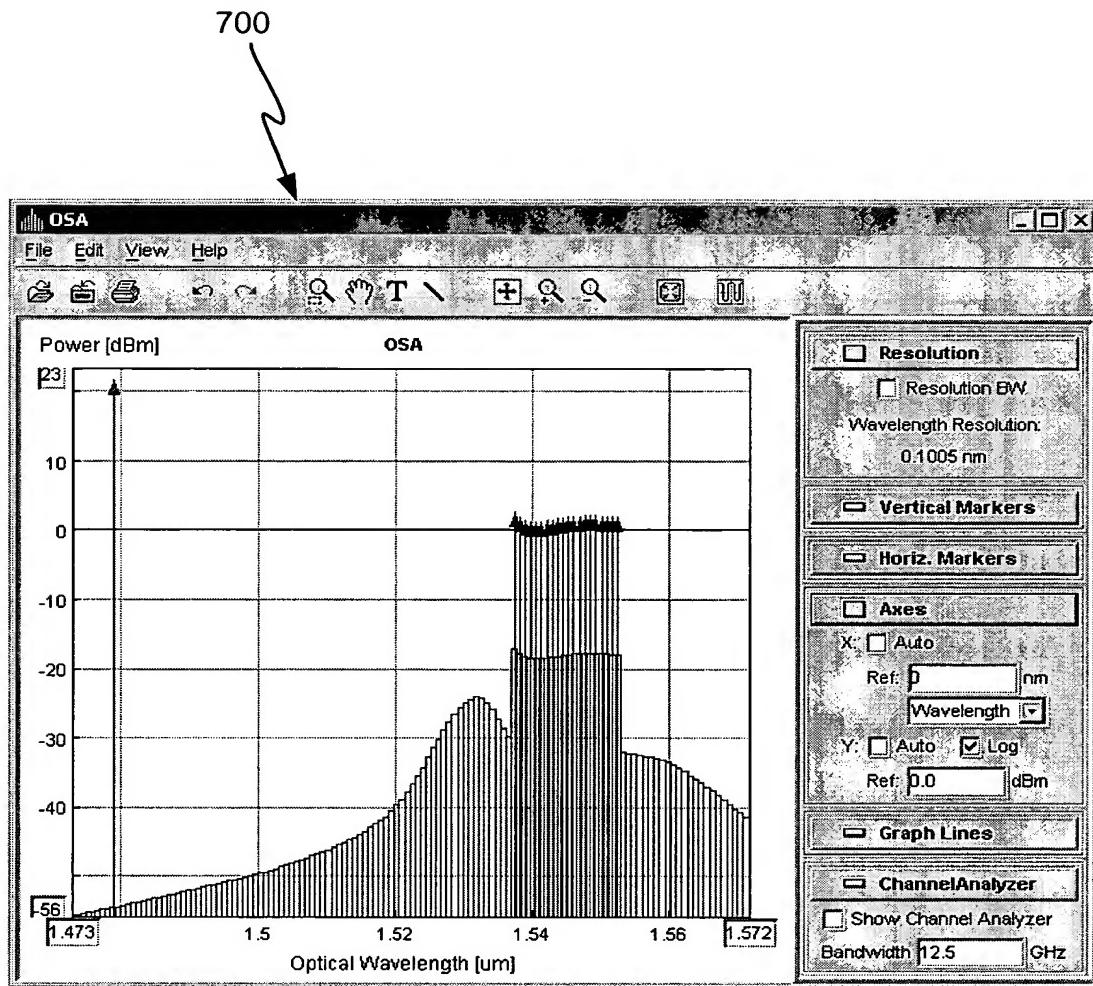


FIG. 7

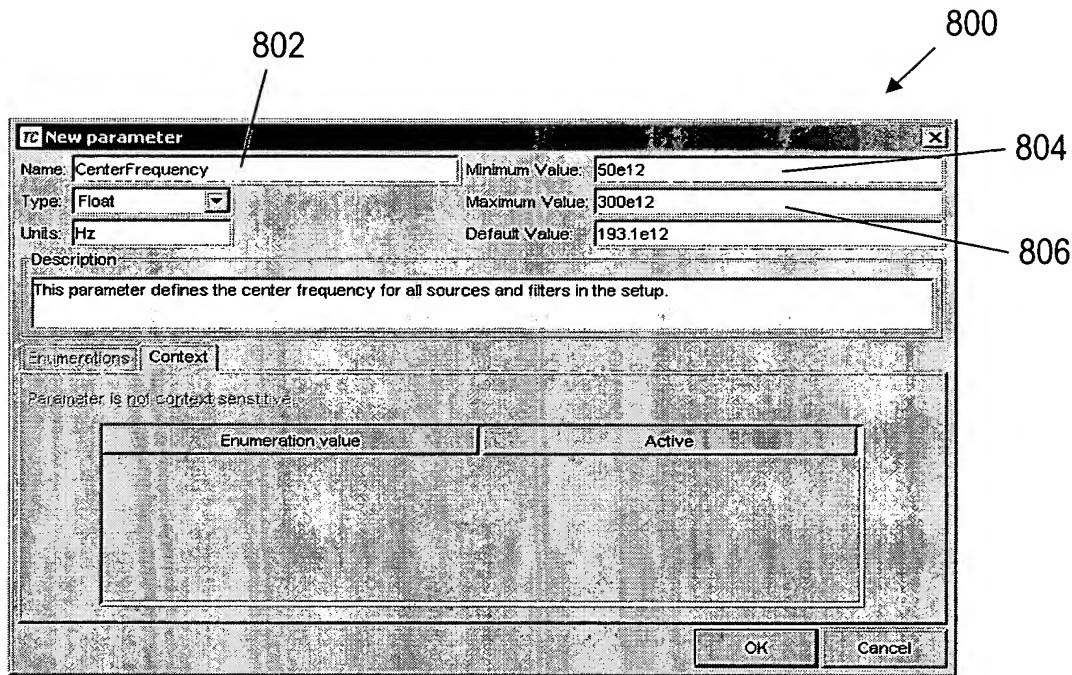


Fig. 8

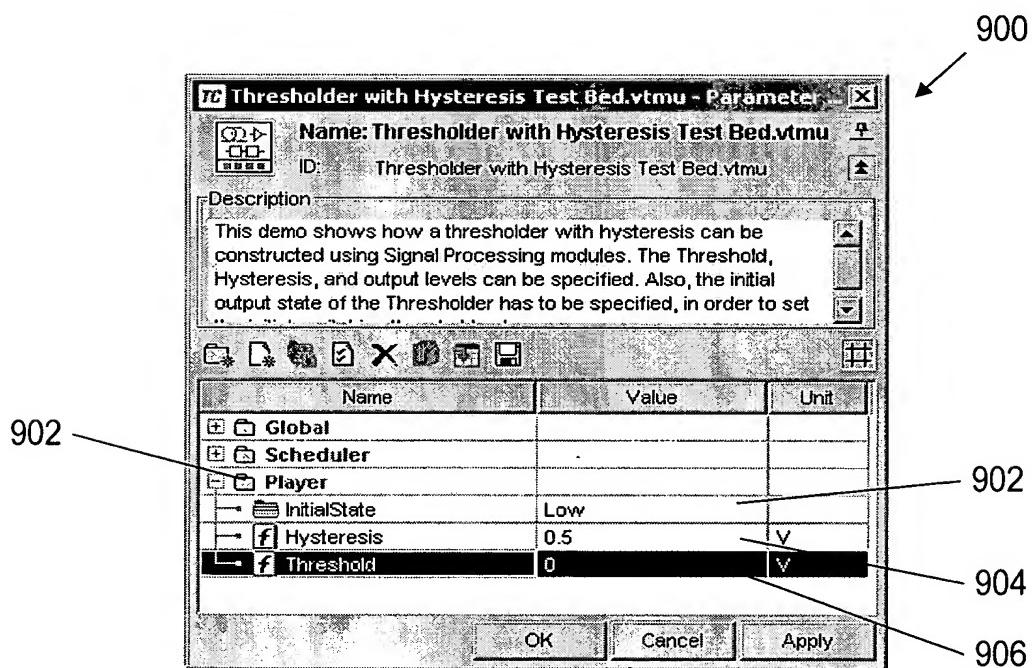


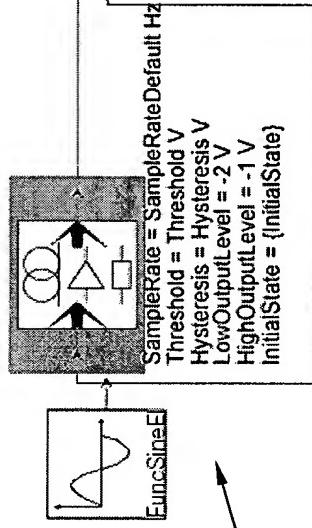
Fig. 9

Thresholder with Hysteresis illustrating the evaluation of enumerated parameters

This demo shows how a thresholder with hysteresis can be constructed using Signal Processing modules. The Threshold, Hysteresis, and output levels can be specified. Also, the initial output state of the Thresholder has to be specified, in order to set the initial switching threshold value.

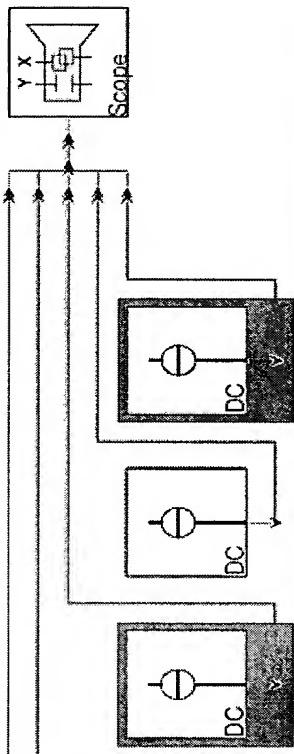
A Galaxy parameter InitialState is used to set the initial output state of the Thresholder. This is an enumerated list. Inside the Galaxy, in the wire delay, this parameter is converted into a numerical value using the string map command:

`! "expr [string map {Low -1 High +1} {InitialState}]"`



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Note the positions of {} braces, to evaluate the string map command.



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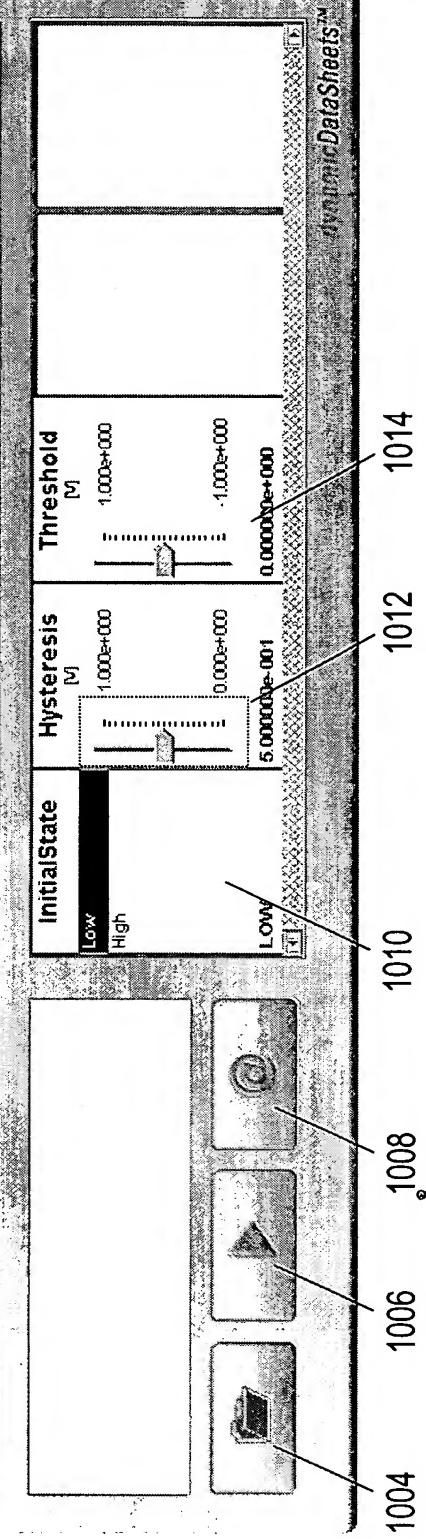


Fig. 10

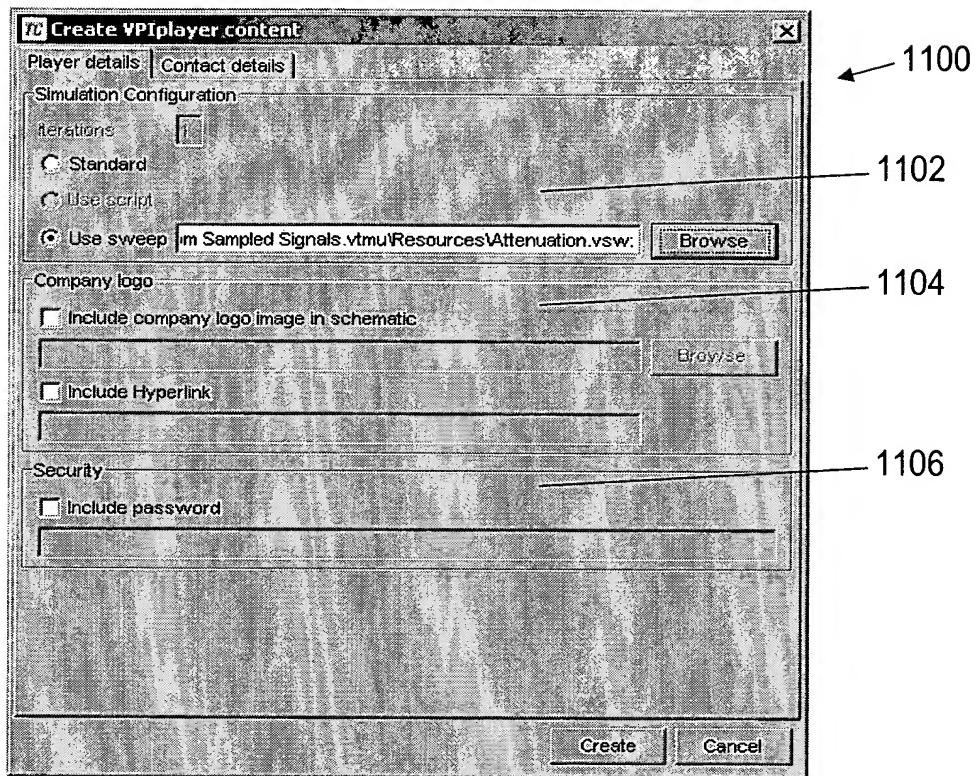


Fig. 11

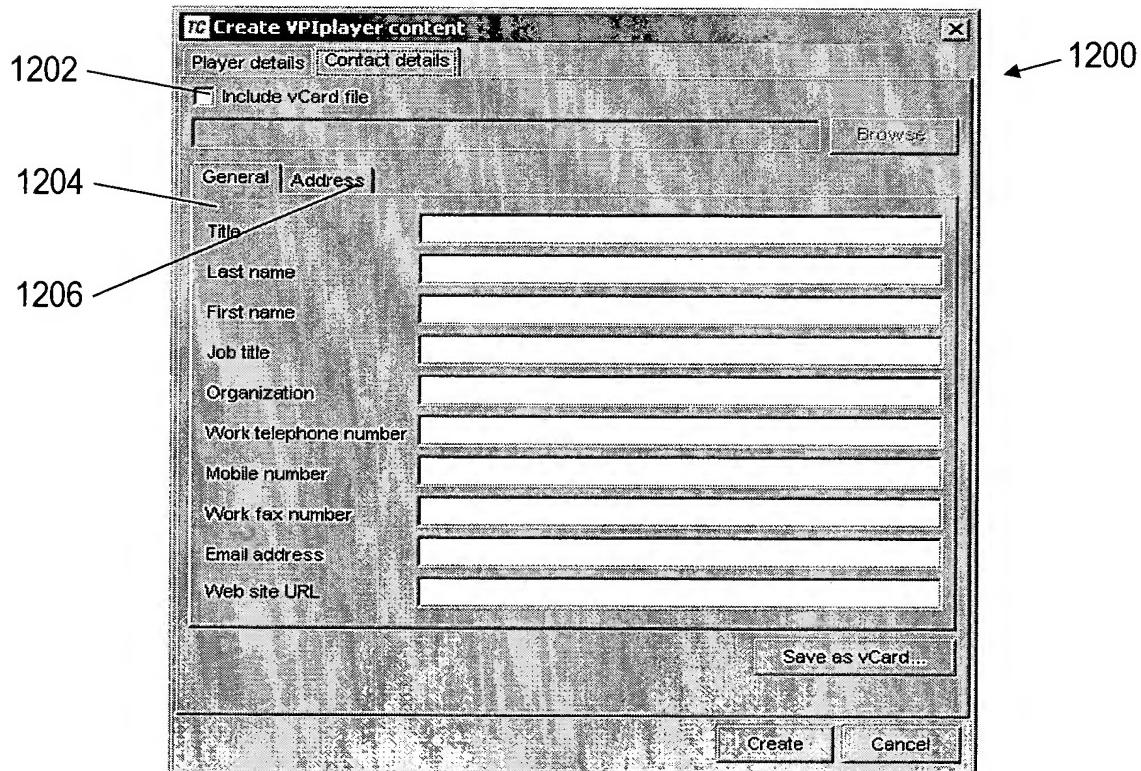


Fig. 12

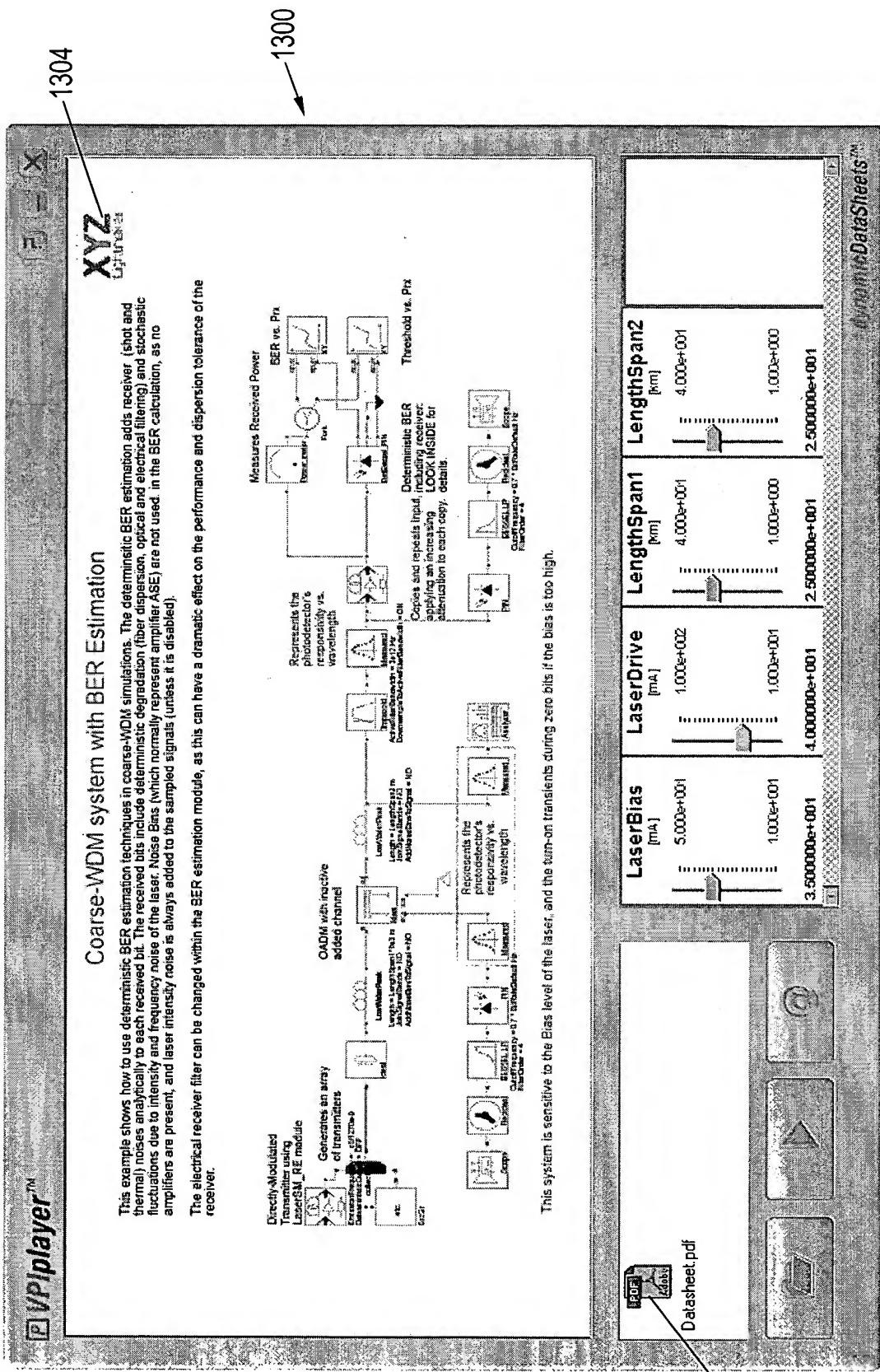


Fig. 13